

Claims

I claim:

Claims 1. – 12. (canceled)

13. (New) A plastic forming apparatus for making plastics from at least two different particulate plastic materials, comprising:

at least two complementary open bare surface molds, each mold being mounted on a rolling cart, where said molds are capable being moved along a trunion track and capable of being heated;

said molds having at least one open bare surface with a sealing edge for ultimately mating with the other open mold, said open bare surface being disposed for receiving the particulate plastic materials;

at least one hopper for dumping a first particulate plastic into each of the open molds individually, said hopper having at least one distributor arm with a downwardly facing distributor tube including louvers for opening and closing the louvers to distribute the particulate material into each of the individual open molds, said hopper being capable of being recharged with surplus particulate plastic material after the molds are used;

a supply of heat for separately heating the complementary molds;

a second hopper for dumping a second particulate plastic into at least one of the molds, said second hopper also having a distributor arm with a downwardly facing distributor tube including louvers for selectively opening and closing the louvers to distribute the particulate material into the at least one mold, said hopper being capable of being recharged with surplus particulate plastic material after the molds are used;

a cooling station for cooling the heated molds; and

a track for rolling the two carts from under the first hopper to a position under the second hopper and then into the cooling station.

14. (New) The apparatus of claim 13, wherein the open molds are made of aluminum and further comprise heating plenums attached to the back of the molds to heat the molds.

15. (New) The apparatus of claim 13, wherein the heating plenums include a propane fired heating unit capable of being tipped over after the particulate material has melted onto the mold, in order to discharge any remaining unmelted particulate plastic.

16. (New) The apparatus of claim 13, wherein the molds are designed to be held apart at a predetermined distance to allow for a resulting article having a sandwich configuration with a foamed center.

17. (New) The apparatus of claim 13, wherein the molds rotate on a horizontal axis on the rolling cart, such that after the desired melted skin has been formed on the mold, the mold can be tipped over to discharge excess plastic before the next step.

18. (New) The apparatus of claim 13, further comprising dump trays under each of the hoppers for receiving the discharge excess plastic.

19. (New) The apparatus of claim 13, further comprising a vacuum mechanism for transferring the excess particulate plastic contained in the dump trays back up into the hopper for further distribution into subsequent molds.

20. (New) The apparatus of claim 13, further comprising water spraying nozzles in the cooling station for cooling the molds after the desired article has been formed.

21. (New) A method of forming plastic articles from a particulate plastic material, comprising:

heating at least two complementary open bare surface molds mounted on a rolling cart, where said molds are capable being moved along a trunion track and capable of being heated;

dumping a first particulate plastic into at least one of the individual open bare surface molds from a first hopper, said hopper distributing the plastic into the at least one mold through at least one distributor arm with a downwardly facing distributor tube including louvers for opening and closing the louvers to distribute the particulate material into the individual open molds;

forming skins on each of the individual open molds by contacting the heated molds with the particulate plastic and melting the plastic against the mold;

tipping the molds to discharge any excess particulate plastic material from the open molds after a skin of melted plastic has been formed on the molds;

moving the rolling cart along the trunion track from underneath the first hopper to a second position under a second hopper;

dumping a second particulate plastic into at least one of the molds from a second hopper also having at least one distributor arm with a downwardly facing distributor tube including louvers for selectively opening and closing the louvers to distribute the particulate material into at least one of the molds, said hopper being capable of being recharged with surplus particulate plastic material after the molds are used;

moving the rolling cart along the trunion track from underneath the second hopper to a final position in a cooling station for cooling the heated molds; and

spraying the heated mold with cool water to cool the molds and removing the resulting article.

22. (New) The method of claim 21, wherein the step of heating the molds is accomplished by heating to a temperature of from about 190 degrees F. to about 500 degrees F.

23. (New) The method of claim 21, wherein the step of spraying the heated mold with cool water is accomplished by cooling to room temperature with a tap water supply.